

SANDEEP SETH (SBN 195914)
ss@sethlaw.com
SETH LAW OFFICES
Two Allen Center
1200 Smith Street, Suite 1600
Houston, Texas 77002
Telephone No.: (713) 244-5017
Facsimile No.: (713) 244-5018

ROBERT J. YORIO (SBN 93178)
yorio@carrferrell.com
STACEY M. TAM (SBN 292982)
stam@carrferrell.com
CARR & FERRELL LLP
120 Constitution Drive
Menlo Park, California 94025
Telephone No.: (650) 812-3400
Facsimile No.: (650) 812-3444

Attorneys for Defendant and Counterclaimant
SENTIUS INTERNATIONAL, LLC

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

ZOHO CORPORATION,

Plaintiff,

v.

SENTIUS INTERNATIONAL, LLC

Defendant.

CASE NO. 4:19-cv-00001-YGR

**DEFENDANT AND COUNTERCLAIMANT
SENTIUS INTERNATIONAL, LLC'S
OPENING CLAIM CONSTRUCTION BRIEF**

SENTIUS INTERNATIONAL, LLC,

Counterclaimant,

v.

ZOHO CORPORATION and ZOHO
CORPORATION PVT., LTD.

Counter-Defendants.

DATE: March 18, 2020
TIME: 9:30 a.m.
COURTROOM: 1
JUDGE: Honorable Yvonne Gonzalez Rogers

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1 **I. INTRODUCTION**

2 Plaintiff Sentius International, LLC (“Sentius”) proposes constructions of the disputed
3 claim terms that are consistent with the plain language of the claims and supported by specification
4 and prosecution history.

5 **II. OVERVIEW OF THE PATENTED TECHNOLOGY**

6 **A. Overview of U.S. Patent No. RE43,633 (“the ‘633 Patent”)**

7 The ‘633 Patent dates back to 1994 and is directed to an improvement to text editors of the
8 day, referred to in the specification and known by those of ordinary skill in the art as visual editors.
9 Visual text editors work in conjunction with user interfaces, which we now commonly refer to as
10 graphical user interfaces or “GUIs” to provide a “what you see is what you get” experience in
11 which the text in the document is formatted into an image on the computer screen in accordance
12 with how the printed document would appear. Declaration of Vijay Madisetti (“Madisetti Decl.”),
13 ¶¶ 25, 38; ‘633 Patent, Fig. 1 and 5:14-22 ((Declaration of Robert J. Yorio (“Yorio Decl.”) Ex. 1.))

14 The ‘633 Patent’s systems and methods improve the efficiency of visual text editors by
15 linking words in a document to related external materials so that when a user clicks on a word in
16 the displayed image of the document on the screen, the system looks up the linking information for
17 that word to retrieve the related external material pointed to for that word and display that
18 information in a pop-up window. They system thus improves the productivity of the word
19 processing program while keeping the size of the text file minimal. Madisetti Decl.” ¶¶ 25-37; ‘633
20 Patent, Fig. 3 and 4 and 5:35-49, 7:50-54 and 8:16-27 (Yorio Decl. Exh. 1).

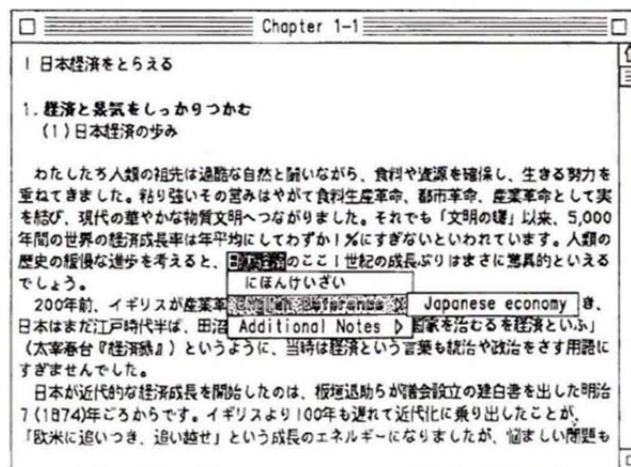


FIG. 3

The '633 Patent builds on existing visual editor functionality by using the starting and ending character position offset values for parsed words and phrases in an open electronic document and, for those of interest, stores them as entries in a data structure, referred to as a look-up table, along with linking information to external references providing additional information relating to such terms and phrases. '633 Patent, Fig. 2 and 6:48-67 (Yorio Decl. Ex. 1).

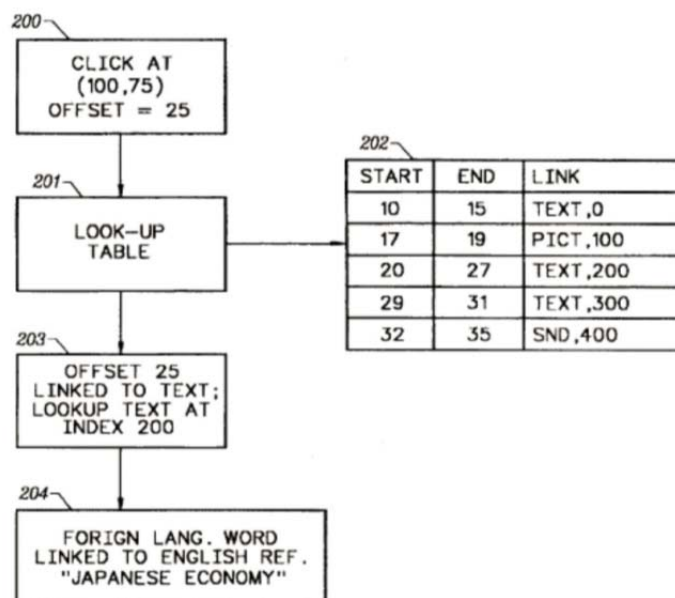


FIG. 2

1 In describing a preferred embodiment of the invention, when the user indicates that he or
2 she wishes to see such additional information, the system converts the display location indicated
3 by the user, converts that display location to a corresponding character position within the
4 document, consults the data structure to identify which word was indicated by the user and the
5 associated linking information needed to retrieve the external content for that word, and uses that
6 linking information to retrieve the external reference information for that word to display to the
7 user in, for example, a pop-up window. Madisetti Decl. ¶ 27; '633 Patent, Fig. 2 and 6:50-61
8 (Yorio Decl. Ex. 1.)

9 Thus, instead of using unwieldy linking information, such as hyperlink data, that is located
10 within the text stream of a document, the present invention stores the relative starting and ending
11 character positions of words in the document in a data structure outside of the text stream. For
12 each entry in the look-up table spanning a given starting and ending character position range, the
13 invention also stores information that points the system to corresponding external reference
14 materials (located outside of the document) to be retrieved and displayed to a user for the
15 particular word in the document in response to a user input indicating a desire to see the external
16 reference material for that word. By storing this specific information in a data structure located
17 outside of the text stream, the invention makes the document smaller and easier to work with and
18 facilitates the processing of the document by the visual editor. Madisetti Decl. ¶¶ 26-30; '633
19 Patent, Fig. 2 and 6:54-64 (Yorio Decl. Ex. 1.)

20 The technology embodied in the asserted patents is applicable to a wide variety of
21 productivity tools including mobile, desktop and web applications. The technology was initially
22 developed to address the problem of being able to link words within a visual text editor program to
23 multiple external sources to better understand foreign texts. *See, e.g.*, '633 patent at 1: 32:67; 2: 1-
24 56. It is particularly useful in linking words and phrases in documents to additional external
25 information associated with such words and phrases, such as content from dictionaries, etc. so that
26 the associated external content can be retrieved and displayed in a pop-up window when needed by
27 an end-user. Madisetti Decl. ¶ 31; '633 Patent, 5:35-54 and 6:39-47 (Yorio Decl. Ex. 1.)
28

1 **B. Overview of U.S. Patent No. 7,672,985 (“the ‘985 Patent”)**

2 The ‘985 patent is directed to a system and method that allows a remote processor to link
 3 words and phrases in a document to supplemental information maintained in databases. See, e.g.
 4 ‘985 Patent at 2:44-59 (Yorio Decl. Ex. 2.) This database content is syndicated from the database
 5 to the remote processor in the form of data objects that the remote processor can use without the
 6 need to have any connection to the database to parse the document and link terms and phrases to
 7 specific content from the data object. *See, e.g., id.* at 8:35-50. When the user clicks on the word,
 8 the linking information is used to retrieve the associated content and displayed. *Id.* at 7:45-51.
 9 Madisetti Decl. ¶ 48.

10 The ‘985 patent is similar in its goal to the ‘633 patent in the sense that its end product is
 11 also a document that has been enhanced with links to external information so that when a user
 12 indicates they wish to see such external information for a given word in an open text document file
 13 the linking information is used to retrieve that external information for the selected word and
 14 display it near the word. Unlike the ‘633 patent, the technology of the ‘985 patent may, but does
 15 not require, the use of a data structure such as a look-up table to link a word or phrase within the
 16 document to the external information. Instead, it may “tag” the word in other ways, such as with
 17 hyperlinks within the document file. In the ‘985 patent, the processor that enhances the document
 18 with the links to external reference information uses a data object that includes content
 19 representing at least a portion of a database containing the external reference information. That
 20 data object is syndicated to the processor so that the latest content from the database may be used
 21 in the linking. The advantage and success of the ‘985 patent is reflected in its usage in on-line
 22 word processing systems that use such spell check databases and data objects to provide spell
 23 check dictionaries used by the user and/or by on-line spell-checking engines. Madisetti Decl.
 24 ¶ 49; ‘985 Patent, 1:64-2:3, 10:14-63 (Yorio Decl. Ex. 2.)

25 Thus, according to the teachings of the ‘985 patent, a data object reflecting content from a
 26 central database content is syndicated to and used by a client processor to enhance a document so
 27 that a user can be shown the associated content upon request. When an electronic document is
 28 parsed, words and phrases of interest in the document are linked to content from the data object so

that, upon the user’s request, that associated content identified from the data object for the word, is displayed in a pop-up window. After the database content has been changed, the data object is re-syndicated to the client processor so that the words or phrases of interests in the document may be linked to the latest database content. Madisetti Decl., ¶ 50; ‘985 Patent, Figures 7, 8A-8D and 7:45-8:5, 9:17, 10:65-11:12 (Yorio Decl. Ex. 2).

III. RELEVANT PRINCIPLES OF CLAIM CONSTRUCTION

“[T]he ultimate question of the proper construction of the patent [is] a question of law,” although subsidiary fact-finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, ___ U.S. ___, 135 S. Ct. 831, 837-38 (2015). The ordinary and customary meaning of a claim term is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). Proper claim construction examines “the claim language, the written description, and, if relevant, the prosecution history . . . [t]he appropriate starting point, however, is always with the language of the asserted claim itself.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186 (Fed. Cir. 1998). Not only do “the claims themselves provide substantial guidance as to the meaning of particular claim terms,” *Phillips*, 415 F.3d at 1314, but also “the context of the surrounding words of the claim” must be considered to determine “the ordinary and customary meaning of those terms.” *Id.*

The patent specification “is always highly relevant to the claim construction analysis . . . [as] it is the single best guide to the meaning of a disputed term.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also possible that “the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316. “Even when the specification describes only a single embodiment, [however,] the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotation marks omitted) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)).

1 In addition to the specification, a court “should also consider the patent’s prosecution
 2 history, if it is in evidence.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir.
 3 1995) (*en banc*), *aff’d*, 517 U.S. 370 (1996). The prosecution history, which is “intrinsic evidence,
 4 . . . consists of the complete record of the proceedings before the PTO [Patent and Trademark
 5 Office] and includes the prior art cited during the examination of the patent.” *Phillips*, 415 F.3d at
 6 1317. “[T]he prosecution history can often inform the meaning of the claim language by
 7 demonstrating how the inventor understood the invention and whether the inventor limited the
 8 invention in the course of prosecution, making the claim scope narrower than it would otherwise
 9 be.” *Id.*

10 In some cases, courts “will need to look beyond the patent’s intrinsic evidence and to
 11 consult extrinsic evidence in order to understand, for example, the background science or the
 12 meaning of a term in the relevant art during the relevant time period.” *Teva*, 135 S. Ct. at 841.
 13 Extrinsic evidence “consists of all evidence external to the patent and prosecution history,
 14 including expert and inventor testimony, dictionaries, and learned treatises.” *Markman*, 52 F.3d at
 15 980. Expert testimony can be useful “to ensure that the court’s understanding of the technical
 16 aspects of the patent is consistent with that of a person of skill in the art, or to establish that a
 17 particular term in the patent or the prior art has a particular meaning in the pertinent field.”
 18 *Phillips*, 415 F.3d at 1318.

19 **A. 35 U.S.C. § 112 ¶ 6**

20 The essential inquiry for determining if a claim term is subject to § 112 ¶ 6 is whether “the
 21 words of the claim are understood by persons of ordinary skill in the art to have sufficiently
 22 definite meaning as the name for structure.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339,
 23 1348 (Fed. Cir. 2015). A claim limitation is presumed to invoke § 112 ¶ 6 when it explicitly uses
 24 the term “means” with functional language. *TriMed v. Stryker Corp.*, 514 F.3d 1256, 1259 (Fed.
 25 Cir. 2008). The presumption is overcome when the limitation further includes the structure
 26 necessary to perform the recited function. *Id.* at 1259-60. Furthermore, the claim language is read
 27 in light of the specification when determining if the claim language recites sufficiently definite
 28

1 structure to avoid § 112 ¶ 6. *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir.
2 2014).

3 Construing a means-plus-function claim term under 35 U.S.C. § 112 ¶ 6 is a two-step
4 process. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311 (Fed. Cir. 2012). First, the court must
5 determine the claimed function; then, the court must identify the corresponding structure in the
6 specification that performs the function. *Id.* Structure disclosed in the specification qualifies as
7 “corresponding structure” if the specification or prosecution history clearly associate the structure
8 to the claimed function. *Id.*

9 The specification may disclose the structure of a § 112 ¶ 6 claim limitation as an algorithm
10 in any understandable terms, including as a mathematical formula, in a flow chart, in prose, or “in
11 any other manner that provides sufficient structure.” *Finisar Corp. v. DIRECTV Group, Inc.*, 523
12 F.3d 1323, 1340-41 (Fed. Cir. 2008); *See also Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d
13 1376, 1384 (Fed. Cir. 2011) (holding a generic description of structure is sufficient; the “specific
14 algorithm” need not be disclosed explicitly). For example, “core logic” modified to perform a
15 particular program was held to be adequate corresponding structure for a claimed function
16 although the specification did not disclose internal circuitry of the core logic to show exactly how
17 it was modified. *Intel Corp. v VIA Technologies, Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003) (“how
18 to modify the core logic to perform Fast Write . . . may also be properly left to the knowledge of
19 those skilled in the art, and need not be specified in the patent”).

20 The sufficiency of a disclosed algorithm is interpreted in light of the understanding of one
21 skilled in the art. *Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336-1340 (Fed. Cir. 2016);
22 *AllVoice Computing PLC v. Nuance Commc’ns, Inc.*, 504 F.3d 1236, 1245 (Fed. Cir. 2007)
23 (“algorithms in the specification need only disclose adequate defining structure to render the
24 bounds of the claims understandable to one of ordinary skill in the art”). For example, a “selector”
25 was adequately disclosed as corresponding structure for the “means . . . for selectively receiving.”
26 *S3, Inc. v nVIDIA Corp.*, 259 F. 3d 1364, 1370-71 (Fed. Cir. 2001). In *S3*, testimony was
27 introduced that the selector was a standard component well known in the art and that standard
28 components were usually represented in the same way that were in the patent in suit. *Id.* There

1 was also testimony that one skilled in the art would “recognize that the selector as shown in the
 2 specification [was] an electronic device such as a simple multiplexer, whose structure [was] well
 3 known.” *Id.* In contrast, a box in a figure (not even a block diagram) labeled “Image Format
 4 Conversion” did not refer to a type of structure nor did it serve to link software to the function of a
 5 “means for converting.” *Medical Instrumentation and Diagnostics v Elekta*, 344 F. 3d 1205, 1211-
 6 14 (Fed. Cir. 2003). The Court noted that if the box had been labeled “Image Conversion
 7 Software,” or if the box at least appeared in a figure illustrating the components of the apparatus,
 8 corresponding structure may have been present. *Id.* at 1214 (“there would be no need for a
 9 disclosure of the specific program code if software were linked to the converting function and one
 10 skilled in the art would know the kind of program to use”).

11 Furthermore, in a case involving the function “status sensing means,” the Federal Circuit
 12 found sufficient corresponding structure where the specification explained that “vacuum sensors
 13 are commercially available units which produce analog signals for the control unit.” *Budde v.*
 14 *Harley-Davidson, Inc.*, 250 F. 3d 1369, 1381 (Fed. Cir. 2001). The Court further looked to the
 15 inclusion of a box labeled “vacuum sensor” in a block diagram and testimony that the
 16 “commercially available unit” would have been understood by a person having ordinary skill in the
 17 art to disclose structure capable of performing the recited function.” *Id.* at 1381-82.

18 **B. Indefiniteness**

19 The party alleging that a claim is invalid as indefinite must make that showing by clear and
 20 convincing evidence. *See Strikeforce Techs., Inc. v. Phonefactor, Inc.*, Civil Action No. 13-490-
 21 RGA-MPT, 2015 U.S. Dist. LEXIS 1027 at *11-12 (D. Del. Jan. 29, 2015) (citing *TecSec, Inc. v.*
 22 *Int’l Bus. Machs. Corp.*, 731 F.3d 1336, 1349 (Fed. Cir. 2013)). “A patent is invalid for
 23 indefiniteness if its claims, read in light of the patent’s specification and prosecution history, fail to
 24 inform, with reasonable certainty, those skilled in the art about the scope of the invention.”
 25 *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

IV. ARGUMENT

A. 'Primary Disputed Terms of 633 Patent

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
1.	"beginning position address of [a] textual source material stored in an electronic database"	'633 Patent: 17, 62, 101, 106, 146	"first character position of a textual source material"	No construction necessary or, in the alternative: "the address at which source material starts in an electronic database"

A person of ordinary skill in the art ("POSITA") who has reviewed the '633 patent specification would understand that the term "beginning position address of [a] textual source material in an electronic database" refers to the "first character position of a textual source material." Madisetti Decl. ¶¶ 61-64.

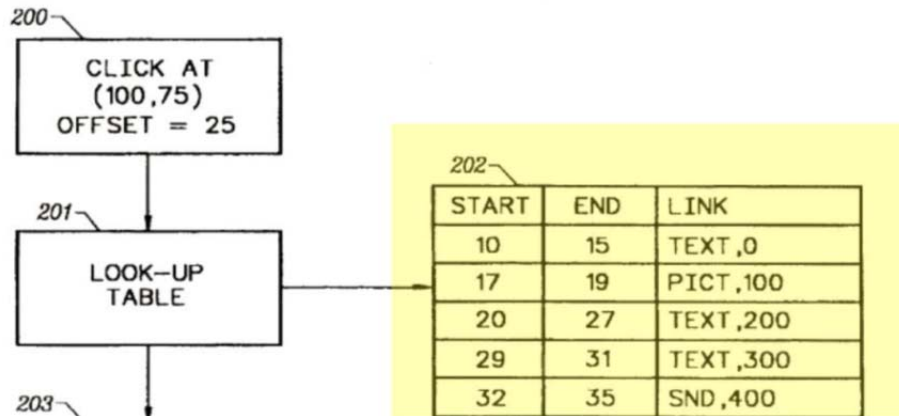
The '633 patent teaches a POSITA that once a textual source material, such as a text file, is opened for display, an index is created of each word based upon its character position offset from beginning of the text:

The original text is provided by a publisher in electronic form in a raw binary text format (e.g. an ASCII text file or other word processor file). **This text is then divided up into the component word or phrases in preparation for the next step.** '633 Patent at 7:8-13.

During the compile process an image of the text is created. When the image is created, **the cuts are indexed based upon the position offset from the beginning of the text.** The start and end points of the cut text are recorded in a look-up table along with the links to external references.

Id. at 7:32-36. (emphasis supplied)

Exemplary starting point and ending point values are shown in the look-up table (201, 202) in FIG. 2 of the '633 patent:



Within the look-up table 201/202 are shown exemplary for words respectively spanning character positions 10-15, 17-19, 20-27, 29-31, and 32-25. As the '633 patent further explains at 7:34-35 and 41:49:

The start and end points of the cut text are recorded in a look-up table along with the links to external references... When the user "clicks" within the text image, the location of the pointer is determined. The location is converted into a position offset from the beginning of the text and used to determine which component word or phrase was selected.

Thus, a POSITA reading the '633 patent would understand the beginning position address of the claims refers to the first character position.

Turning to the phrase "stored in an electronic database." As the '633 patent describes at 5:15-25, the text file (*e.g.*, an ASCII text file or other word processor file) is opened for editing via the visual editor so that the character positions of each of the characters of each of the words and phrases in the document can be identified:

A text file 10 and/or a multimedia source 14, consisting of an audio/ video filter 11 and synchronized text 13, which may include sound, images, and/or video is edited during construction of a linked text database by a visual editor 19 that used to build a wordified database 20.

Thus, a POSITA reading the '633 specification would understand that the "electronic database" refers to a text file that is opened for processing such as by a visual editor.

Zoho's alternative proposal is wrong for at least two reasons. First, it does not define the term "address" thereby inviting both jury confusion and possible construction of the term at trial in a manner contrary to the specification. Second, Zoho's proposed construction rewrites the claim language by *not* tethering it to the beginning location of the *textual* source material. Third the proposed construction leaves unclear what the phrase "starts in an electronic database" means.

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
2.	"starting/ending point address"	'633 Patent: 17, 22, 62, 101, 106, 146	"starting/ending character position"	"an offset value from the beginning position address to the starting/ending point"

A POSITA reading the '633 specification would understand that the terms "starting point address" and "ending point address" in the claims respectively refer to the starting and ending character positions of the characters of a given word or phrase relative to the first character position. Madisetti Decl. ¶¶ 65-70.

Supplementing the specification descriptions previously cited, and again in reference to Fig. 2, the '633 Patent explains to the POSITA at 6:48-64 that the starting and ending point addresses are the starting and ending character positions of a word:

The click position is determined and used to calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset value of 25 is returned. The offset value is compared to the **start and end position** indices stored in a look-up table (201, 202)...In the example of FIG. 2 an offset of 25 is located at the look-up table location having a **start point of 20 and an end point of 27** and is linked to text located at position 200.

Thus, a POSITA reading the '633 patent would understand the starting and ending point addresses of a word or phrase are its starting and ending character positions relative to the first character position of the file's text. *See also*, '633 Patent, Fig. 1 and 5:15-34, 6:48-64 and 7:3-39

(Yorio Decl. Ex. 1.)

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
3.	"offset value"	'633 patent: 17, 21, 22, 62, 101, 105, 106, 146	"a value from a beginning point"	"distance in bytes from a beginning point"

A POSITA reading the '633 patent specification would understand that the term "offset value" refers to "a value from a beginning point," such as the beginning point of the document's text. Madisetti Decl. ¶ 71; *Sentius v. BlackBerry* Agreed Claim Construction Order, p.1 ("a value from a beginning point") (Yorio Decl. Ex. 3).

As described in the '633 patent at 6:54-64: "In the example shown in FIG. 2, the user clicks at a particular location, e.g. horizontal and vertical coordinates **100** and **75**, respectively, and an **offset value of 25 is returned. The offset value is compared to the start and end position indices stored in a look-up table (201, 202)**... In the example of FIG. 2 an offset of **25** is located at the look-up table location having a start point of **20** and an end point of **27** and is linked to text located at position **200**." *See also*, definition of offset value in the Personal Computer Dictionary (p. 346- "refers to a value added to a base address to produce a second address"); Madisetti Decl. ¶ 71; Yorio Decl. Ex. 20.

Thus, a POSITA would understand that an "offset value" is a position relative to a starting point" because that value is compared to stored starting and ending positions in the look-up table to determine for which word or phrase the user indicated the desire to see external reference material. (Madisetti Decl., ¶¶ 32, 34-37, 60 and 71)

Zoho's' proposed construction improperly limits the term "offset value" to a "distance in bytes" despite the fact that the word "bytes" appears nowhere in the claim language or specification. The term "offset value" has no limited meaning in the context of the claims or specification. Neither the claims nor the specification refer to bytes or distance and Zoho's

1 proposed construction unnecessarily adds uncertainty to the construction of “offset value.” (*See*
2 *Phillips*, 415 F.3d at 1321.) The specification consistently refers to “offset value” in terms of a
3 position relative to the beginning of the text, not as a distance. ‘633 Patent, 6:53-59. This is a
4 critical distinction that Defendants’ proposed construction overlooks.

5 Although the construction of “offset value” is clear from the claim language and the
6 specification, Zoho improperly relies on the prosecution history of U.S. Patent No. 5,822,720 for
7 its proposed construction. The portions of the prosecution history cited by Zoho do not
8 unequivocally invoke any disavowal of claim scope or require such a narrow construction. For
9 example, the prosecution history recites that “Cassorla is limited to a specific text format. In
10 contrast, the claimed invention operates upon pure byte offsets that are unrelated to the data type,
11 location, and format.” (U.S. Patent No. 5,822,720 Prosecution History, Response to Office Action,
12 pp. 10-11 (Jan. 25, 1996); *See Id.*, Response to Office Action, p. 7 (May 28, 1996); Response to
13 Office Action, pp.6-7 (July 8, 1996).)

14 But without a clear, unequivocal disavowal of claim scope (as required by cases such as
15 *Pacing Technologies, LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1024 (Fed. Cir. 2015) and *Thorner*
16 *v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)), the prosecution history
17 cannot unduly limit the construction of “beginning position address” to only a pure byte offset.
18 While the applicant’s statement mentions “byte offsets,” the underlying argument the applicant
19 makes is that the prior art is limited “to a specific text format” and that the present invention
20 “operates in a manner that is unrelated to the data type, location or format.” The applicant could
21 not be limiting the invention *only* to byte offsets because that would be contrary to the applicant’s
22 statement that the invention is not limited to “a specific data format.” Thus, no prosecution history
23 estoppel applies.

24 As the construction proposed by Sentius is consistent with the specification and
25 prosecution history and has none of the infirmities of Zoho’s proposed construction, it should be
26 adopted.
27
28

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
4.	“image of the source material”/ “source material image”	’633 patent: 17, 101	“an image displayed on a computer screen derived from the source file”	“an image displayed on a computer screen derived from the text created by the (1) linking and (2) reassembly of the cut pieces (from the ‘source material’)” ¹

A person of ordinary skill in the art who reviewed the ‘633 patent specification would understand that these terms refer to an image displayed on a computer screen derived from the source file.

As the ‘633 patent explains at “[d]uring compilation, the cut text is reassembled to create an image of the text that the end user sees. At this point additional formatting may be applied to the text for final display.” (*Id.* at 7:23-26) and “[d]uring the compile process an image of the text is created. When the image is created, the cuts are indexed based upon the position offset from the beginning of the text.” (*Id.* at 7:32:34).

Zoho’s proposed construction is incorrect because it improperly imports limitations contained in a description of a preferred embodiment into the claims though neither the claims nor the specification requires such limitations. *Phillips*, 415 F.3d at 1316 and 1323; *Continental Circuits, LLC v. Intel Corp.*, 913 F. 3d 788, 797 (Fed. Cir. 2019). Specifically, Zoho’s proposed construction imports limitations as to the process of forming the source material image, such as “linking”, “reassembly” and “cut pieces” where the claims do not include any of these terms or language specifying the process of forming the source material image. Thus, Zoho invites error by importing limitations into the claims from a preferred embodiment that are not found in the claims themselves. *Phillips*, *Continental Circuits*. Thus, Zoho’s proposed construction should be rejected.

¹ On January 29, 2019, Sentius received a notice from Zoho that it was changing its proposed construction and such changes, if Zoho briefs them, will be addressed by Sentius in its responsive briefing.

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
5.	“look-up table”	’633 patent: 17, 21, 62, 101, 105, 146	“a data structure that contains values for searching or retrieving”	“an array or matrix of data that contains values for searching”

A POSITA reviewing the ‘633 specification would understand that a “look-up table” is “a data structure that contains values for searching. Madisetti Decl. ¶¶ 30, 35, 37, 72. Fig. 2 of the ‘633 patent shows a look-up table (201, 202) that stores the starting and ending character positions of one or more words in a document as well as associated linking information for those one or more words.’633 Patent Fig. 1 and 2 and 5:5-15, 6:48-67, 7:1-10, 7:40-45, 8:29-33 and 8:39-48.

There is actually no genuine dispute regarding the meaning of this term. Zoho’s proposed construction explicitly recites that the look-up table is an “array or matrix.” However, that construction fails to explain to the jury what is an “array or matrix” thereby inviting jury confusion at trial. But an “array” is defined in technical dictionaries as a “data structure that contains a group of elements.” (Christensson, P. (October 17, 2007). Array Definition. (Yorio Decl. Ex. 20).

The ‘633 Patent claims specify the groups of elements include starting and ending addresses and linking information. In the example shown in Fig. 2 of the ‘633 Patent, the offset value “25” was used to look-up and retrieve the linking information associated with the word spanning character positions “20” through “27.” See ‘633 Patent, 6:54-64; Madisetti Decl., ¶¶ 35, 37. Consistent with the ‘633 specification, Christensson explains: “Arrays are commonly used in computer programs to organize data so that a related set of values can be easily sorted or searched.”

Thus, both parties actually substantively agree on the construction “a data structure that contains values for searching.” But Zoho’s addition of an array or matrix unnecessarily complicates the construction of look-up table as those terms themselves would require their own individual constructions, but that would only bring the jury back again to a data structure. The Court should reject Zoho’s construction and avoid jury confusion by making clear that a “look-up

table” would encompass any data structure that would allow for recording and searching for the starting and ending point addresses and associated linking information.

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
6.	“means for compiling the source material image from at least the plurality of discrete pieces”	’633 patent: 19/103	Subject to §112 ¶ 6. <u>Function (agreed):</u> “compiling the source material image from at least the plurality of discrete pieces” <u>Structure:</u> a computer having a visual editor and user interface programmed to perform the recited function, and equivalents thereof	Subject to §112 ¶ 6. <u>Function (agreed)</u> <u>Structure:</u> None/indefinite

A person of ordinary skill in the art reviewing the ‘633 specification would understand that the “means for compiling the source material image from at least the plurality of discrete pieces” refers to a computer having a visual editor and user interface programmed to compile a source material image from at least the plurality of discrete pieces. Madisetti Decl., ¶ 76.

A POSITA understands that parsing the text is a conventional and necessary step so that the parsed text may be displayed and that conventional visual editors of the day included or used parsers to recognize the starting and ending points of the words in the document so that an image thereof could be created by the user interface. Madisetti Decl. ¶¶ 76 -77.

Consistent with such conventional knowledge, the ‘633 patent describes at 7:3-12 that a visual editor is used to parse the document:

The word cutting process is accomplished using a simple visual editor, for example a point and click system using a pointing device, such as a mouse. The process divides the text into the individual components of text that are linked with the additional reference material. The original text is provided by a publisher in electronic form in a raw binary text format (e.g. an ASCII text file or other word processor file). This text is then divided up into the component word or phrases in preparation for the next step.

1 In the preferred embodiment, the ‘633 Patent explains that the visual editor conventionally
2 uses a grammar parser to build an index that locates each word in the text file:

3 A text file 10 and/or a multimedia source 14, consisting of an audio/video
4 file 11 and synchronized text 13, which may include sound, images, and/
5 or video is edited during construction of a linked text database by a visual
6 editor 19 that used to build a wordified database 20. The database 20
7 sources a grammar parser 23 and a link engine 22 that builds an index 21
which, in turn, locates each textual and audio/video reference in the source
material.” ‘633 Patent, 5:15-23.

8 Further, the ‘633 Patent describes in detail how the compilation process is performed (7:22-
9 49) and specifically discloses that the system conventionally uses a user interface to display an
10 image of the parsed document: [d]uring the compile process an image of the text is created.” ‘633
11 Patent, 7:32-33; Yorio Decl. Ex. 1. The user interface 32 is used to conventionally display the text
12 image to the user: “A user interface **32** to the system includes an electronic viewer **43** that runs
13 along with the system application program 42 and provides the following functional elements:
14 index management **37**, user display **38**, a table of contents **39**, a pop-up display **40**, and a personal
15 dictionary **41**.” ‘633 Patent, Figures 1, 2 and 3 and at 5:34-65.

16 Once the text image is displayed, the user may interact with it, as the ‘633 Patent describes
17 at 7:41-45: “When the user “clicks” within the text image, the location of the pointer is determined.
18 The location is converted into a position offset from the beginning of the text and used to
19 determine which component word or phrase was selected.” The ‘633 Patent also indicates that the
20 structure that compiles the source material image includes a user interface: “A user interface **32** to
21 the system includes an electronic viewer **43** that runs along with the system application program 42
22 and provides the following functional elements: index management **37**, user display **38**, a table of
23 contents **39**, a pop-up display **40**, and a personal dictionary **41**.” See ‘633 Patent at Figures 1, 2 and
24 3 and 5:34-38.

25 There is no genuine dispute that creating a source material image is a conventional step.
26 See, Madisetti Decl. ¶ 41; Yorio Decl. Ex. 8 (“A Structure Editor for Abstract Document Objects”
27 at pps. 412, 418, 430-435) (describing how common operating systems support document viewers
28 and editors and how objects are selected by their relative positions when opened, viewed and
edited.)

Thus, a person of ordinary skill in the art would also know that visual editors with the computer's operating system user interface conventionally compile an image of the source document to display on the screen so that a user can locate their pointer anywhere in the displayed document and provide an input, such as typing in a particular place in the document. Madisetti Decl., ¶¶39-47 and 79-80, '633 Patent, Figures 1-3 and 5:34-65.

Num	Disputed Term	Claim(s)	Zoho Construction	Sentius Construction
7.	"means for converting the display address of the selected discrete portion to an offset value from the beginning position address"	'633 patent: 17, 101	Subject to §112 ¶ 6. <u>Function (agreed):</u> "converting the display address of the selected discrete portion to an offset value from the beginning position address" <u>Structure:</u> None/indefinite	Subject to §112 ¶ 6. <u>Function (agreed)</u> <u>Structure:</u> a computer having a visual editor and an electronic viewer module programmed to use an index to determine the offset value from the beginning position address of the selected horizontal and vertical coordinates, and equivalents thereof

Thus, a person of ordinary skill in the art would understand that "means for converting the display address of the selected discrete portion to an offset value from the beginning position address" in claims 17 and 101 of the '633 patent refers to "a computer having a visual editor and an electronic viewer module programmed to use an index to determine the offset value from the beginning position address of the selected horizontal and vertical coordinates, and equivalents. Madisetti Decl., ¶ 81.

As the '633 Patent describes, the image is conventionally used to receive the screen location of a user input and convert that screen location into an offset within the document (Madisetti Decl., ¶ 77): "FIG. 2 is a flow diagram in which the mechanism for indexing and linking text to external references as shown according to the invention. To find a reference to a particular word or other selected entry displayed on the screen, the user clicks the text that is

1 viewed with a pointing device, such as a mouse (200). The click position is determined and used to
2 calculate an offset value within the text (200). In the example shown in FIG. 2, the user clicks at a
3 particular location, e.g. horizontal and vertical coordinates 100 and 75, respectively, and an offset
4 value of 25 is returned.” ‘633 Patent at 6:48-57.

5 As the ‘633 Patent further explains: “The user interacts with the electronic book using a
6 pointing device. When the user “clicks” within the text image, the location of the pointer is
7 determined. The location is converted into a position offset from the beginning of the text and used
8 to determine which component word or phrase was selected.” *Id.* at 7:40-45. Moreover, a person of
9 ordinary skill in the art would also know that known visual editors working with a computer’s
10 operating system were conventionally able to convert a display position (display address) into to a
11 character position within the document so that a user can position their pointer anywhere on the
12 displayed document to provide an input, such as typing in a particular place in the document.
13 Madisetti Decl., ¶ 85.

14 Thus, a person of ordinary skill in the art would understand that the ‘633 patent recites
15 sufficient structure (including any needed algorithmic support) for this element by disclosing a
16 user interface and a visual editor as this function is a common and known function of a user
17 interface used by a visual editor so that a user input can be provided to indicate a location on the
18 displayed image of a document to indicate the location within the document where the user wishes
19 to indicate, for example, to place his or her cursor at a particular location within the document.
20 Madisetti Decl., ¶¶ 81-82 and 85. In particular, the specification recites the user interface 32
21 (which includes application program 42 and electronic viewer module 43) which converts the
22 display coordinates of the user input into a corresponding offset value within the document. (‘633
23 patent, 5:34-38 and 6:50-61) Furthermore, a known and conventional feature of user interfaces and
24 visual editors was to convert the indicated display location to a corresponding position within the
25 document, consistent with what the ‘633 patent shows and describes. Madisetti Decl., ¶ 86. Since
26 the specification clearly articulates the structure, the term “means for converting the display
27 address of the selected discrete portion to an offset value from the beginning position address” is
28

not indefinite. (See *Sentius v. BlackBerry* Agreed Claim Construction Order, p.4; *Sentius v. Flyswat* Claim Construction Order, pp. 40-41; Madisetti Decl., ¶¶ 81, 85 and 86).

B. Primary Disputed Terms of ‘985 Patent

Num	Disputed Term	Claim(s)	Sentius Zoho Construction	Construction
8.	“data objects associated with a/the term database” “data objects associated with a database”	’985 patent: 1, 11, 20, 21	“computer readable data structures that include data from [a/the] [term] database”	“computer-readable data structures that include data from [a/the] [term] database and rules for processing the one or more documents and linking content with identified terms”

A person of ordinary skill in the art who reviewed the ‘985 specification would understand the terms “data objects associated with a term database,” “data objects associated with the term database,” and “data objects associated with a database” used in identified claims refer to computer readable data structures that include data (content) from the [term] database. These data objects are used by remote processors to link words or terms in a document with associated content for display. Madisetti Decl., ¶ 87. ’985 Patent at Abstract. (“Data objects that represent the contents of the database and templates are syndicated to remote servers running a processing engine. The processing engine uses these data objects to execute linking rules without requiring a connection to the database.”)

Thus, the person of ordinary skill in the art would understand that objects in the context of the ‘985 patent are computer readable data structures that include data from a database, including (where recited in the claims) from a term database. Madisetti Decl., ¶ 90.

Zoho’s proposed construction improperly requires that a data object must include rules for processing or linking content to terms. But the claims which use the term “data object” (claims 1, 11, 20, 21) do not contain any limitation that the data object themselves contain such rules. The term “rules” only appears in connection with the parsing element recited in the claims. Moreover, the portions of the specification cited by Zoho that mention rules do not in any way support Zoho’s

construction because nowhere does the specification require that each and every data object categorically include rules for processing and linking. In a preferred embodiment, the RichLink Processor interacts with a template object to identify rules that should be used in processing and interacts with a lexicon object to identify linking rules. ‘985 Patent at 8:51-58. So even in the preferred embodiment the rules for processing or linking are not necessarily contained in the syndicated data object, much less both rules as suggest by Zoho. Moreover, even had a preferred embodiment disclosed a single data object containing both sets of these rules, that does not mean that the rules become a necessary part of the construction of the term “data object.” Indeed, such a construction would improperly import from a description of a preferred embodiment into the claim in violation of black letter claim construction law. *Phillips*, 415 F. 3d at 1316 and 1323; *Continental Circuits, LLC v. Intel Corp.*, 913 F. 3d 788, 797 (Fed. Cir. 2019). In addition, even if an embodiment included a data object containing rules for both processing *and* linking, courts are routinely warned against confining claims to a particular embodiment. *Id.*

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
9.	<p>“parsing one or more documents to identify at least one term based on at least one rule” /</p> <p>“parsing one or more source documents to identify at least one term based on one or more predetermined rules”</p>	‘985 Patent: 1, 11	<p>“breaking one or more documents into segments to identify at least one term based on at least one rule”</p> <p>“breaking one or more source documents into segments to identify at least one term based on at least one predetermined rule”</p>	<p>“breaking one or more source documents into segments and creating an index of those segments and using at least one rule to identify at least one term in the index”/</p> <p>“breaking one or more source documents into segments and creating an index of those segments and using at least one predetermined rule to identify at least one term in the index”</p>

One of ordinary skill in the art reviewing the ‘985 Patent specification would understand that the term “parsing one or more documents to identify at least one term based on at least one

rule” and the term “parsing one or more source documents to identify at least one term based on one or more predetermined rules” refers to “breaking at least one document into segments to identify at least one term based on at least one [predetermined] rule.” Madisetti Decl., 95.

The ‘985 Patent refers to parsing in its conventional sense. Madisetti Decl., ¶ 96. In a preferred embodiment, for example: “Files matching the specified types are parsed 710 using natural language processing to tokenize the text into significant objects such as words and phrases until a full index of all words and phrases on the site is created.” ‘985 Patent at 6:58-60.

The ‘985 patent also describes at 9:1-4 that the RichLink Processor of the preferred embodiment engages in parsing as part of the linking process (Madisetti Decl., ¶ 97):

“When a file is sent to the RichLink Processor, several operations can be optionally run on the text. The text may be parsed, the document categorized, and page-level meta data tags added to the page.

The term “parsing,” consistent with its conventional use in the ‘985 patent specification, refers to breaking input into smaller chunks so that a program can act upon that information. *See, e.g.* Microsoft Press Computer Dictionary at p. 292 (defining “parsing” as “to break input into smaller chunks so that a program can act upon the information.”) (Yorio Decl. Ex. 17). *See also*, Madisetti Decl., ¶¶ 46-47, 50, 95-98 and 127-131 and ‘985 Patent at Figs. 1, 7, 9A-9B, and at 6:53-57, 7:35-52, 8:51-58.

Zoho’s proposed construction seeks to improperly add the requirement of “creating an index” as part of the construction of “parsing.” But creating an index does not appear in claims 1, 11, 20 or 21. Zoho cites to the ‘985 Patent specification at 6:50-7:4 and 9:1-13 to support its argument. Certainly, the conventional step of creating an index of the character positions of character in the source material is described in the specification, including at the cited portions, so that a source material image could be conventionally generated. But all Zoho is doing here is reading into the claim a feature of a specific embodiment described in the specification. Again, this violates fundamental claim construction principles where neither the claim, the specification or the prosecution history requires that an index be made as an essential part of the parsing element in the

method and system claims of the ‘985 Patent. *Phillips*, 415 F.3d at 1316 and 1323; *Continental Circuits*, 913 F.3d at 797.

Num	Disputed Term	Claim(s)	Sentius Construction	Zoho Construction
10.	“lexicon object”	’985 patent: 8, 18	“computer readable representation of content used to match terms with content or to create tags to assist in matching terms to content”	“computer-readable data structure that provides a local representation of the content of the term database and data required to match terms and create tags”

A person of ordinary skill in the art who reviewed the ‘985 specification would understand the term “lexicon object” refers to a computer readable presentation of content used to match terms with content or to create tags to assist in matching terms to content. Madisetti Decl., ¶¶ 91, 94.

As the ‘985 Patent describes at 8:51-58 for a preferred embodiment that the Lexicon Object is used to identify what terms should be tagged in the source text:

The Richlink Processor interacts with the Template Object 930 to identify the rules that should be used in processing and the Lexicon Object 920 to identify what terms should be tagged in the Source text.

As the ‘985 Patent further describes at 9:19-29, the Lexicon Object provides a local representation of the content of the Term Database so that a direct connection to the Term Database is not required:

The Lexicon Object provides a local representation of the content of the Term Database for use by the RichLink Processor 910 so a direct connection to the Term Database is not required and the Term Database may be on a remote server from the RichLink Processor.

Thus, a person of ordinary skill in the art would understand in the context of the ‘985 patent that a “lexicon object” is a computer readable representation of content that is used to match terms with content or to create tags to assist in matching terms to content.

1 Zoho's proposed construction requires that the Lexicon object not only contain a local
 2 representation of the Term Database that is used to match terms to content but that it also
 3 additionally have "data required to "create tags." But this construction is contrary to the
 4 specification which only requires that the Lexicon object have a local representation of the term
 5 database that is used to identify which terms should be tagged. To be sure, the '985 specification
 6 does state at 9:23-29 regarding a preferred embodiment that "[t]he Lexicon Object contains data
 7 required to match terms and create tags such as a representation of the terms in the database for
 8 fast matching...and other Term Database content for which fast access is required, such as
 9 annotation content." But that portion of the '985 specification does not contradict or alter the other
 10 portions of the specification. Rather, when read in conjunction with the rest of the specification,
 11 only confirms that the information contained in the Lexicon Object used to "match terms and
 12 create tags" is the data used to identify which terms to tag or annotation content. Therefore,
 13 Zoho's proposed construction is confusing at best and risks the jury believing that the Lexicon
 14 object have data in addition to the local representation of the term database used to identify terms
 15 for tagging or the annotated content for such terms. For example, the '985 patent describes that the
 16 Template Object contain "the format of the tag" (id. at 9:45) which also could be considered data
 17 required "to create tags." Therefore, Zoho's proposed construction should be rejected.

18 V. CONCLUSION

19 For at least the reasons set forth above, the Court should adopt the constructions proposed
 20 by Sentius and reject those proposed by Zoho.

21 Dated: January 31, 2020

Respectfully Submitted,

22 CARR & FERRELL LLP

23 By /s/ Robert J. Yorio
 24 ROBERT J. YORIO

25 SETH LAW OFFICES

26 By /s/ Sandeep Seth
 27 SANDEEP SETH

28 Attorneys for Defendant and
 Counterclaimant SENTIUS
 INTERNATIONAL, LLC

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on January 31, 2020 to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system per Civ. L.R. 5-1(h)(1). Any other counsel of record will be served by U.S. Mail or hand delivery.

By /s/ Robert J. Yorio
ROBERT J. YORIO